Title: Space Management Of An IMS Database



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Current IMS Database

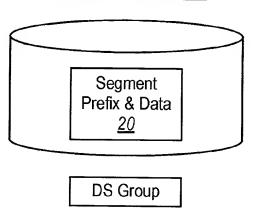


FIG. 1A (Prior Art)

Invention Database

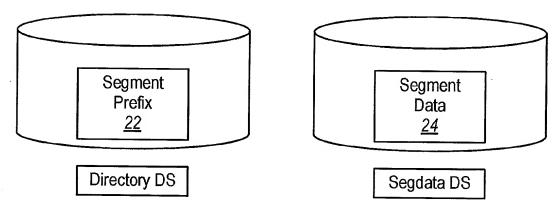


FIG. 1B

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Layout Of Segment In Directory Dataset

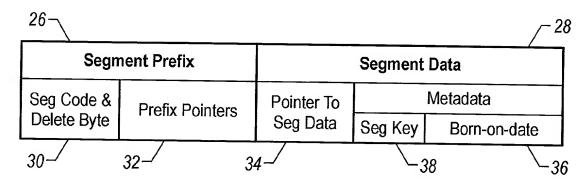


FIG. 2A

Layout Of Segment In Segdata Dataset

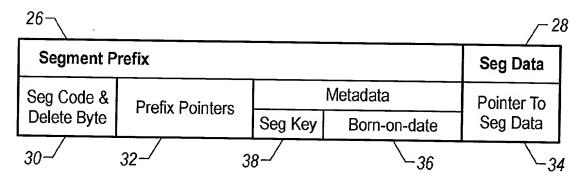


FIG. 2B

Layout Of Segment In Segdata Dataset

40~	42~	_ 44
Segment Prefix	Segment Data	Trans-
Seg code & delete byte	User Data	Born On Date
46-/	48-	50

FIG. 3

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	0, 10	
DBD	NAME=IVPDB1,ACCESS=(HIDAM,OSAM)122	
DIR	DD1=DFSIVD1,SIZE=2048, UOW=(500,50,10)	
SEGM FIELD FIELD LCHILD LCHILD XDFLD	T DD1=DFSIVD1A,DEVICE=3380,SIZE=2048 NAME=A1111111,PARENT=0,BYTES=40,RULES=(LLV,LAST),PTR=(TB,CTR) NAME=(A1111111,SEQ,U),BYTES=010,START=00001,TYPE=C NAME=A9999999,BYTES=010,START=00011,TYPE=C NAME=(A1,IVPDB1I),POINTER=INDX,RULES=LAST NAME=(A1X,IVPDB1X),POINTER=INDX NAME=AXXXXXXXX,SEGMENT=A1111111,SRCH=(A9999999) NAME=(C1X,IVPDBIZ),POINTER=INDX NAME=CXXXXXXX,SEGMENT=C1111111,SRCH=(C9999999)	
SEGM FIELD FIELD LCHILD	T DD1=DFSIVD1B,DEVICE=3380,SIZE=4096 NAME=B1111111,PARENT=A1111111,BYTES=(1000,50), RULES=(LLV,LAST),PTR=(TB) NAME=(B11111111,SEQ,M),BYTES=010, START=00003,TYPE=C NAME=/SXB1 NAME=(B1X,IVPDB1Y),POINTER=INDX .NAME=BXXXXXXX,SEGMENT=B1111111,SRCH=(B1111111),SUBSEQ=(/SXB1)	X
DATASE SEGM FIELD FIELD	T DD1=DFSIVD1C,DEVICE=3380,SIZE=8192 NAME=C1111111,PARENT=B1111111,COMPRTN=(DFSKMPXO,DATA,INIT), RULES=(LLV,LAST),PTR=(TB),BYTES=(8000,50) NAME=(C11111111,SEQ,U),BYTES=010,START=00003,TYPE=C NAME=C9999999,BYTES=010,START=00011,TYPE=C	X
DIRGEN		
DBDGEN FINISH END	N	

FIG. 4A

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DBD NAME=IVPDB2,ACCESS=HDAM,RMNAME=(DFSHDC40,4,1000) DIR DD1=DFSIVD2, UOW=(100,10) DATASET DD1=DFSIVD2A,DEVICE=3380,SIZE=2048 SEGM NAME=A1111111,PARENT=0,BYTES=40,RULES=(LLL,LAST), Χ COMPRTN=(DFSKMPX0,DATA,INIT) **FIELD** NAME=(A1111111,SEQ,U),BYTES=010,START=00001,TYPE=C DATASET DD1=DFSIVD2B,DEVICE=3380,SIZE=4096 NAME=B1111111,PARENT=A1111111,BYTES=(1000,50), SEGM Χ RULES=(LLV,LAST),PTR=(TB) NAME=(B1111111,SEQ,U),BYTES=010,START=00003,TYPE=C **FIELD** DATASET DD1=DFSIVD2C, DEVICE=3380, SIZE=8192 NAME=C1111111,PARENT=B11111111,COMPRTN=(DFSKMPXO,DATA,INIT), SEGM RULES=(LLV,LAST),PTR=TB,BYTES=8000 **FIELD** NAME=(C1111111,SEQ,U),BYTES=010,START=00001,TYPE=C DIRGEN **DBDGEN FINISH END**

FIG. 4B

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Secondary Index 50 Index Record Key Ptr Token 60 64 Root Segment 62 Index Target Seg

Target Database

<u>54</u>

FIG. 5

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Secondary Index 52 Index Record -58 Ptr Key Token 56 -60 62-64 Target Root Segment Segment 66 Block <u>54</u>

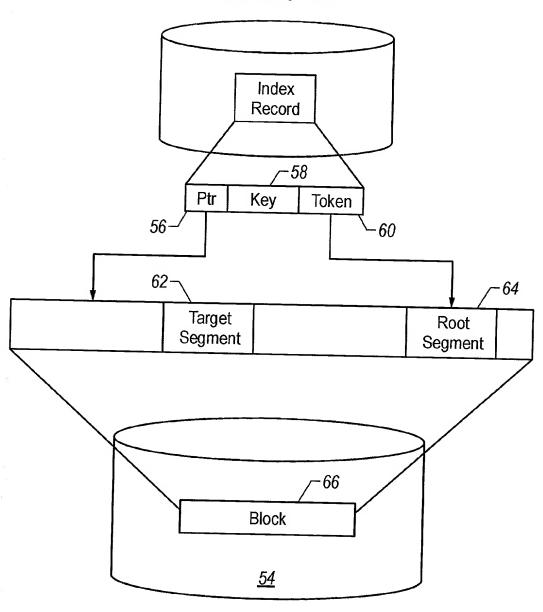
Target Database

FIG. 6

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Secondary Index



Target Database

FIG. 7

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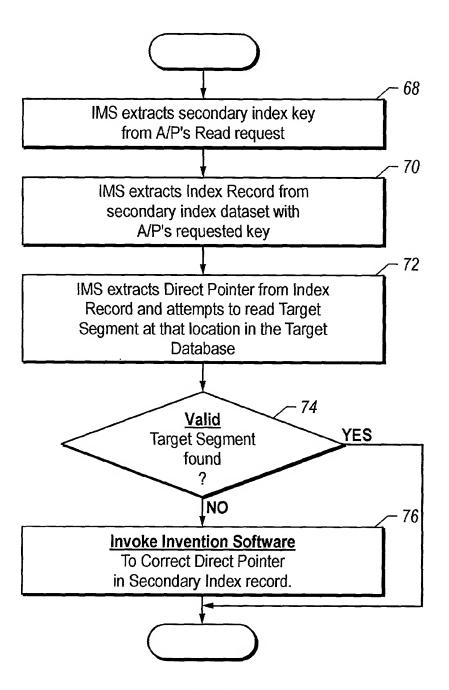


FIG. 8

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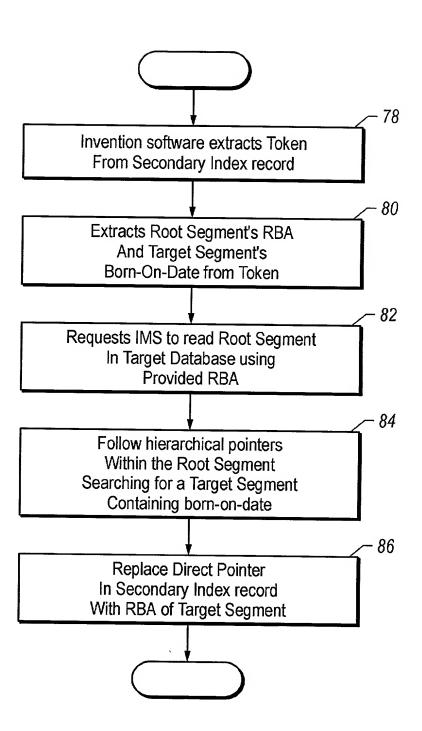


FIG. 9

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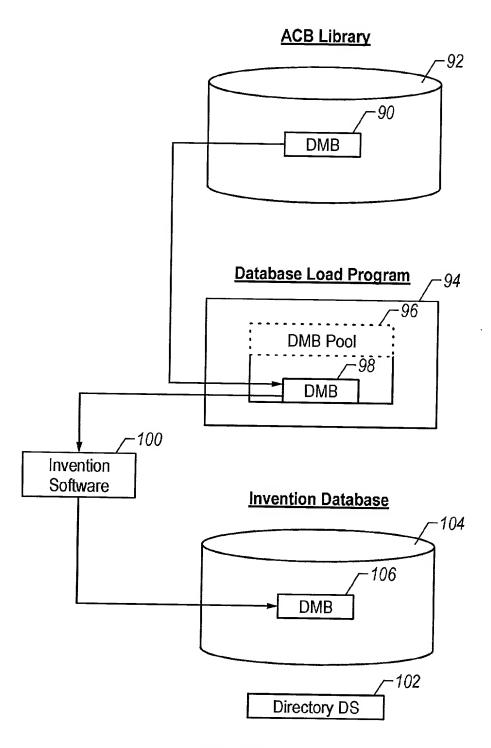


FIG. 10

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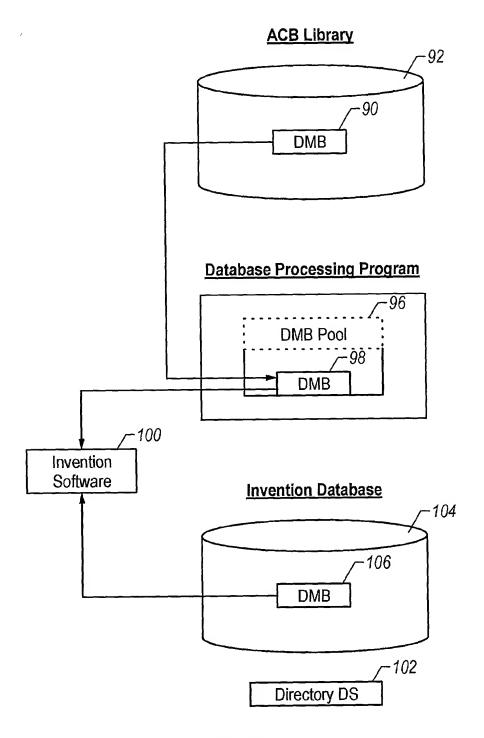


FIG. 11

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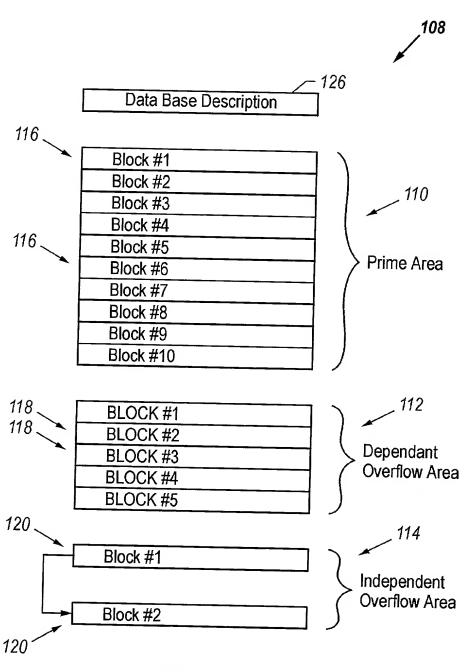


FIG. 12

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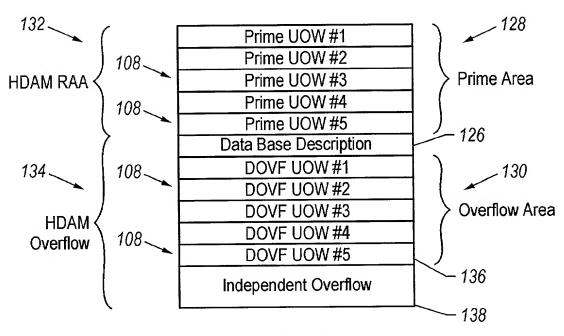
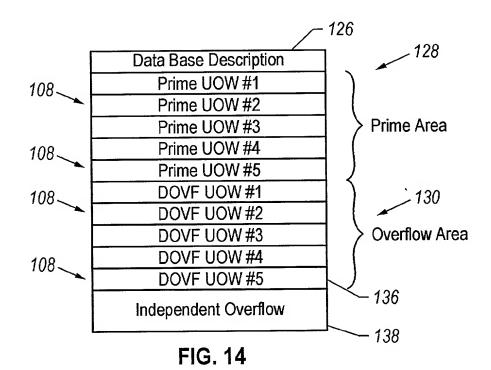


FIG. 13



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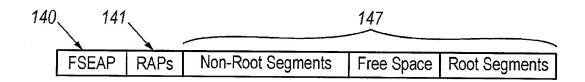


FIG. 15

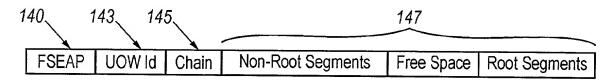


FIG. 16

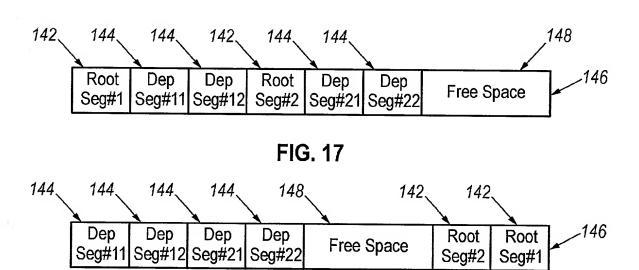


FIG. 18

Title: Space Management Of An IMS Database

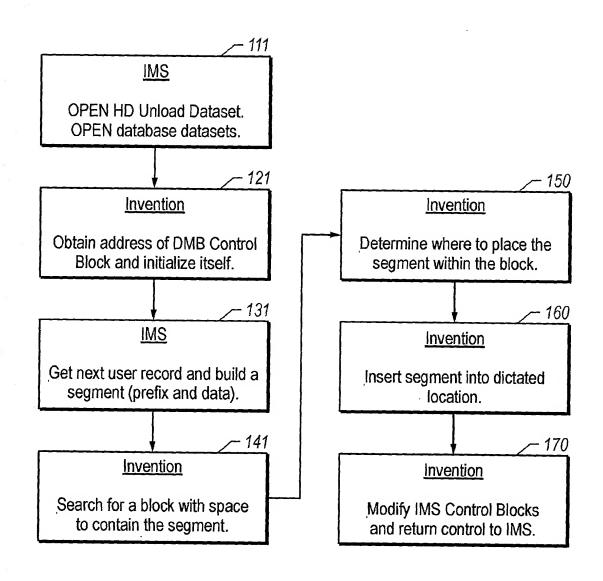


FIG. 19

Title: Space Management Of An IMS Database

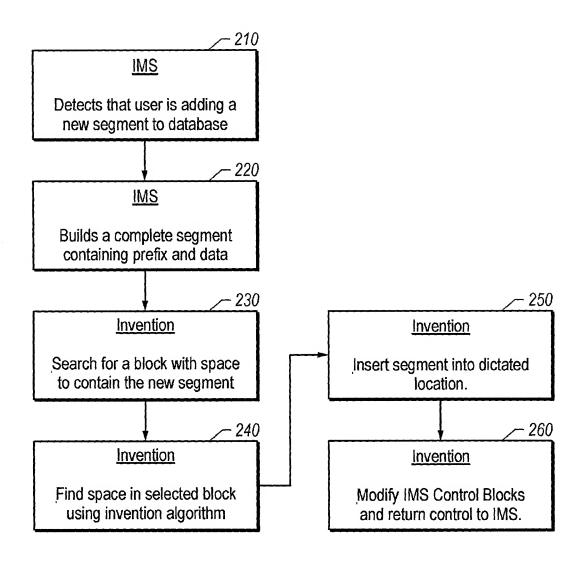


FIG. 20

Title: Space Management Of An IMS Database

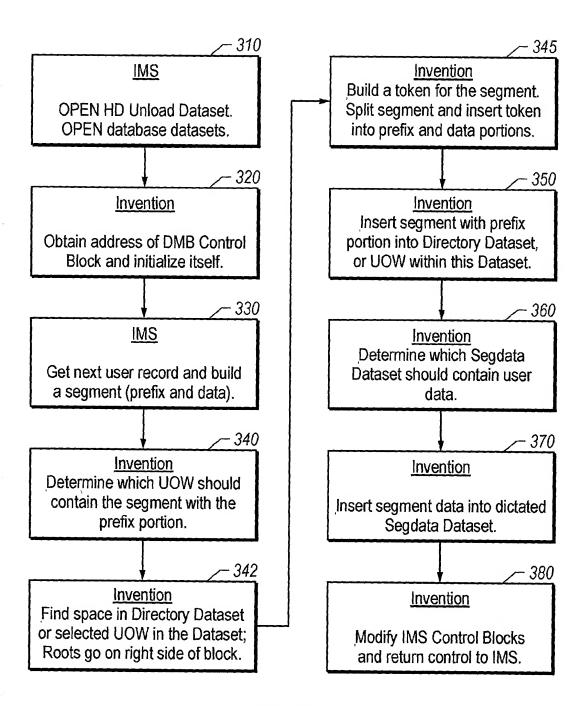


FIG. 21

Title: Space Management Of An IMS Database

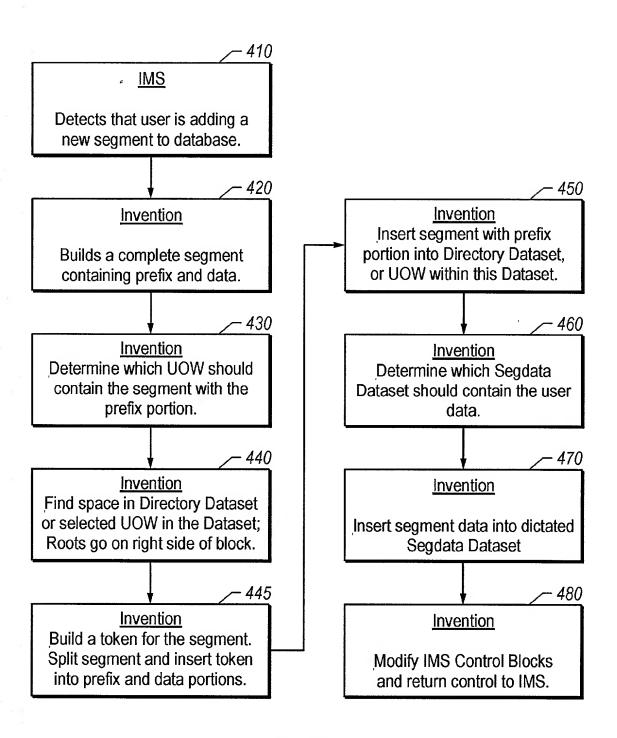


FIG. 22